CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

TENTATIVE
MONITORING AND REPORTING PROGRAM NO. R9-2004-0223

FOR
LEUCADIA WASTEWATER DISTRICT
FOREST R. GAFNER WATER RECLAMATION PLANT
SAN DIEGO COUNTY

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Monitoring and Reporting Program (M&RP) and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. M onitoring points shall not be changed without notification to and the approval of the Executive Officer.

2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this M&RP.

4. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.

5. Monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer.

6. If the Leucadia Wastewater District (discharger) monitors any pollutants more frequently than required by this M&RP, using test procedures

approved under 40 CFR, Part 136, or as specified in this M&RP, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

7. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this M&RP, and records of all data used to complete the application for this M&RP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

8. Records of monitoring information shall include the following:

   a. The date, exact place, and time of sampling or measurements,
   b. The individual(s) who performed the sampling or measurements,
   c. The date(s) analyses were performed,
   d. The individual(s) who performed the analyses,
   e. The analytical techniques or method used, and
   f. The results of such analyses.

9. All monitoring instruments and devices that are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

10. The discharger shall report all instances of noncompliance not reported under Provision F.6 of Order No. R9-2004-0223 at the time monitoring reports are submitted. The reports shall contain the information described in Provision F.6.

11. The monitoring reports shall be signed by an authorized person as required by Provision F.21.

12. A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquot must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the

collection of the previous aliquot. Aliquot may be collected manually or automatically.

13. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

14. Sampling and analysis shall, at a minimum, be conducted in accordance with Article 6 of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria).

15. Any known direct cross-connection between recycled and potable water shall be reported to the Regional Board, State DHS, and County DEH within 24 hours.

B. EFFLUENT MONITORING

1. Samples of the effluent discharged from the Forest R. Gafner Water Reclamation Plant (FRGWRP) shall be collected at a point at or nearest to the effluent pump station, downstream of the disinfection process and prior to any dilution.

2. The discharger is responsible for monitoring and reporting in accordance with the following criteria:

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flowrate[1]	MGD	Continuous	Continuous	Quarterly
Turbidity	NTU	Continuous	Continuous[2]	Quarterly
Chlorine Contact Time (CT)	mg-min/L	Calculated	Continuous[3]	Quarterly
Chlorine Residual	mg/L	Continuous	Continous[4]	Quarterly
Total Coliform	MPN/100ml	Grab	Daily[5]	Quarterly
Total Dissolved Solids	mg/L	Composite	Quarterly	Quarterly
Electroconductivity[6]	dS/m	Composite	Quarterly	Quarterly
pH	Unit	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Composite	Quarterly	Quarterly
Total Phosphorus	mg/L	Composite	Quarterly	Quarterly
Chloride	mg/L	Composite	Annually	Annually

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
Sulfate	mg/L	Composite	Annually	Annually
Adjusted Sodium Adsorption Ratio[7]	---	Composite	Annually	Annually
Iron	mg/L	Composite	Annually	Annually
Manganese	mg/L	Composite	Annually	Annually
Methylene Blue Active Substances	mg/L	Composite	Annually	Annually
Boron	mg/L	Composite	Annually	Annually
Fluoride	mg/L	Composite	Annually	Annually
Aluminum	mg/L	Composite	Annually	Annually
Antimony	mg/L	Composite	Annually	Annually
Arsenic	mg/L	Composite	Annually	Annually
Barium	mg/L	Composite	Annually	Annually
Beryllium	mg/L	Composite	Annually	Annually
Cadmium	mg/L	Composite	Annually	Annually
Chromium	mg/L	Composite	Annually	Annually
Copper	mg/L	Composite	Annually	Annually
Cyanide	mg/L	Composite	Annually	Annually
Mercury	mg/L	Composite	Annually	Annually
Nickel	mg/L	Composite	Annually	Annually
Selenium	mg/L	Composite	Annually	Annually
Thallium	mg/L	Composite	Annually	Annually

Notes: MGD = Million gallons per day
MPN/100 ml = Most Probable Number per 100 milliliters
mg-min/L = milligrams-minutes per liter
mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units
dS/m = deciseimens per meter

1 Report both the daily average and daily maximum.

2 Effluent turbidity analyses shall be conducted continuously using a continuous monitoring and recording turbidimeter. Compliance with the daily average operating filter effluent turbidity limit of 2 NTU shall be determined by averaging the recorded turbidity levels at a minimum of four-hour intervals over a 24-hour period. Compliance with the turbidity standard of not exceeding 5 NTU more than 5 percent of the time over a 24-hour period shall be determined

using the levels of recorded turbidity taken at intervals of no more than 1.2 hours over a 24-hour period. Should the continuous turbidity meter and/or recorder fail, grab sampling at a minimum frequency of one sample every 1.2 hours may be substituted until the turbidity meter and/or recorder is fixed. The discharger shall report the daily average effluent turbidity, the daily duration that turbidity exceeds 5 NTU, and the daily maximum turbidity (daily being defined as the 24-hour period from 12 am to 12 am). Continuous turbidity monitoring must also be provided prior to filtration to ensure adequate process control, and automatic actuate coagulant feed when the turbidity of the secondary treated effluent is greater than 10 NTU.

3 Calculated CT (chlorine concentration multiplied by modal contact time) values shall be determined and recorded continuously. The discharger shall report the daily minimum CT value and daily minimum modal contact time. The discharger shall report the date(s), value(s), time, and duration when the CT value falls below 450 mg-min/L, and/or the modal contact time falls below 90 minutes.

4 Chlorine concentrations shall be recorded by a continuous recording meter. The discharger shall report the minimum daily chlorine residual.

5 Samples for total coliform bacteria shall be collected at least daily and at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures. The discharger shall report the results of daily total coliform bacteria monitoring and running 7-day median determination.

6 Samples for electroconductivity shall be monitored concurrently with ASAR.

7 The adjusted sodium adsorption ratio (Adj. SAR) is calculated as follows:

$$\text{Adj. SAR} = \frac{Na}{\sqrt{(Ca_x + Mg)/2}}$$

where Na, Ca_x, and Mg are in milliequivalent per liter (meq/L). Ca_x is a modified Ca value calculated using Table 3-2 contained in *Irrigation with Reclaimed Municipal Wastewater, A Guidance Manual*.

3. The discharger shall review the monitoring results for compliance with Order No. R9-2004-0223 and submit a statement of compliance as part of this Monitoring and Reporting Program. The statement of compliance shall identify and report all violations of effluent limitations or disinfection requirements of Order No. R9-2004-0223.

C. SAN MARCOS CREEK

1. The discharger shall monitor San Marcos Creek at the following stations:

   a. a station located upstream of the La Costa Golf Course;
   b. a station located downstream of the La Costa Golf Course after the confluence of the north fork of San Marcos Creek;
   c. a station located where a discharge into or from the La Costa Golf Course reclaimed water storage pond would first contact San Marcos Creek during an overflow or flood event.

2. The discharger shall monitor the stations within San Marcos Creek according to the following table:

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flowrate	Gallons/Day	Estimate[1]	Quarterly[2]	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly[2]	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly[2]	Quarterly
Total Phosphorous	mg/L	Grab	Quarterly[2]	Quarterly
Methylene Blue Active Substances	mg/L	Grab	Quarterly[2]	Quarterly
Total Coliform	MPN/100ml	Grab	Quarterly[2]	Quarterly

Notes: 1. Calculate from estimate of creek cross sectional area and velocity.
2. If there is an overflow or flood event causing water contact between the La Costa Golf Course reclaimed water storage pond and San Marcos Creek the discharger shall begin monitoring on the first day of the overflow or flood event and continue monitoring daily until contact between the reclaimed water storage pond and San Marcos Creek has been terminated.

D. FILTRATION PROCESS MONITORING

If coagulation is not used as part of the treatment process, the turbidity of the filter influent and effluent shall be continuously measured. If effluent turbidity exceeds 2 NTU based on a 24-hour average, or if the influent turbidity exceeds 5 NTU for more than 15 minutes or 10 NTU at any time, then discharger shall submit a written report of the incident as part of the monthly monitoring report to the Regional Board. The report shall describe the measures taken to automatically activate chemical addition or to divert wastewater.

E. SEWAGE SOLIDS AND BIOSOLIDS

If solids are disposed of by means other than discharge to the Encina Water Pollution Control Facility, a record of the type, quantity, and manner of disposal and/or reuse of all solids removed in the course of sewage treatment shall be maintained at the FRGWRP and be made available to Regional Board staff upon request.

F. RECYCLED WATER USERS SUMMARY REPORT

1. If the LWD is supplying reclaimed water directly to parties other than itself (for onsite use only) or the Carlsbad Municipal Water District (CMWD), the

LWD shall submit a quarterly recycled water users summary report containing the following information:

a. Total volume of recycled water supplied to all recycled water users for each month of the reporting period,
b. Total number of recycled water use sites,
c. Address of the recycled water use sites and
d. Basin Plan name and number of hydrologic subarea underlying the recycled water use site.

2. If the LWD is supplying reclaimed water directly to parties other than itself (for onsite use only) or the Carlsbad Municipal Water District (CMWD), the LWD shall submit an annual recycled water users compliance report containing the following information:

a. Recycled water use site summary report

(1) Name of the reclaimed water reuse site
(2) Owner of the reclaimed water use facility
(3) Address of the reuse site
(4) Name of the reclaimed water user supervisor
(5) Phone number of the on-site water user supervisor
(6) Mailing address of the recycled water use supervisor, if different from site address
(7) Volume of reclaimed water delivered to the reuse site on a monthly basis

b. Recycled water user site inspections

Number of reclaimed water reuse site inspections conducted by discharger/producer staff and identification of sites inspected for the year.

c. Recycled water user violations of the LWD's rules and regulations

The discharger shall identify all recycled water users known to be in violation of the LWD's rules and regulations for recycled water users**.** The report shall include a description of the noncompliance and its cause, including the period of noncompliance, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

G. REPORT SCHEDULE

Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

Reporting Frequency	Report Period	Report Due
Quarterly	January - March	May 1st
	April - June	August 1st,
	July - September	November 1st
	October - December	February 1st
Annually	January-December	February 1st

Monitoring reports shall be submitted to:

ATTN: POTW Compliance Unit
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Ordered by: TENTATIVE
JOHN H. ROBERTUS
Executive Officer

Date: September 8, 2004